In the Claims:

Please cancel claims 1-5 and add the following new claims:

6.   A method for interference analysis for a mobile radio network comprising an adaptive antenna in at least some of its cells and having traffic channels and control channels, comprising the steps of: calculating, for mobile radio network frequency allocation planning, in each case an interference ratio of the interference of the traffic channels of an adaptive antenna of a first cell with traffic channels of an adaptive antenna of a second cell is calculated as a sum of the interference probabilities weighted with traffic values of individual part-cells, of the interferences of in each case one traffic channel of the adaptive antenna of the first cell with a user signal of in each case one traffic channel of the adaptive antenna of the second cell by adding the values of the traffic in all part-areas of the radio cell part-areas covered by the beams of the adapted antennas of the first and second cell; calculating the interference ratio of the interference of a traffic channel of a first cell without adaptive antenna with traffic channels of a second cell with an adaptive antenna as the sum of the interference probabilities weighted with the traffic values of the individual part cells, of the interferences of this traffic channel of the first cell with in each case one traffic channel of the adaptive antenna of the second cell by adding the values of the traffic in all part-areas of the radio cell part-areas covered by the beams of the adaptive antenna; and calculating the interference ratio of the interference of a control channel of a first cell with or without adaptive antenna with a control channel of a second

cell with or without adaptive antenna referred to the total cell area from the user signal/interference signal ratio of these control channels in the total cell area in each case without taking into consideration any adaptive antennas of one or both of these cells.

7. A method as defined in claim 6, including specifying a different value as interference threshold value, above which a co-frequency exclusion of considered cells is defined, for the interference between traffic channels than for the interference between traffic channels and control channels.

8. A method as defined in claim 6, including covering a local part-area of the radio cell area with a beam of a radio cell.

9. A method as defined in claim 6, including defining the sum of the values of traffic in all part-areas of the radio cell part-areas covered by the beams of the adaptive antenna as traffic in an area covered by an adaptive antenna of a cell.

10. A frequency planning device for interference analysis of a mobile radio network having at least some cells comprising an adaptive antenna and having traffic channels and control channels which are operative: so that for mobile radio network frequency allocation planning, an interference ratio of the interference of the traffic channels of a first cell comprising an adaptive antenna with traffic channels of a second cell comprising an adaptive antenna to a user signal in a second cell is calculated as a sum of the interference probabilities weighted with traffic values of the individual part-cells, of the interferences of in each case one traffic channel of the adaptive antenna of the first cell

with a user signal of in each case one traffic channel of the adaptive antenna of the second cell ; so that the interference ratio of the interference of a traffic channel of a first cell without adaptive antenna with traffic channels of a second cell comprising an adaptive antenna is calculated as a sum of the interference probabilities, weighted with the traffic values of the individual part-cells, of the interferences of a traffic channel of the first cell with in each case one traffic channel of the adaptive antenna of the second cell; and so that the interference ratio of the interference of a control channel of a first cell with or without adaptive antenna with a control channel of a second cell with or without adaptive antenna referred to the total cell area is calculated from the user signal/interference signal ratio of these control channels in the total cell area in each case without taking into consideration any adaptive antennas of one of these cells.

In The Abstract:

Please cancel the present abstract and insert the following therefore:

An efficient, high-quality interference analysis taking into consideration characteristics of adaptive antennas is made possible by a frequency planning device and, respectively, a method for interference analysis for a mobile radio network exhibiting an adaptive antenna in at least some of its cells having traffic channels and control channels in which the mobile radio network frequency allocation planning, in each case the interference ratio of the interference of the traffic channels of an adaptive antenna of a

first cell with traffic channels of an adaptive antenna of a second cell is calculated as a sum of the interference probabilities weighted with the traffic values of the individual part-cells, of the interferences of in each case one traffic channel of the adaptive antenna of the first cell with a user signal of in each case one traffic channel of the adaptive antenna of the second cell. The interference ratio of the interference of a traffic channel of a first cell without adaptive antenna with traffic channels of a second cell with an adaptive antenna is calculated as the sum of the interference probabilities, weighted with the traffic values of the individual part cells, of the interferences of a traffic channel of the first cell with in each case one traffic channel of the adaptive antenna of the second cell. The interference ratio of the interference of a control channel of a first cell with or without adaptive antenna with a control channel of a second cell with or without adaptive antenna referred to the total cell area is calculated from the user signal/interference signal ratio of these control channels in the total cell area in each case without taking into consideration any adaptive antennas of one or both of these cells.